

# Mineral Industry Surveys

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# **COPPER IN JULY 2006**

Average daily U.S. mine production of recoverable copper declined by about 2% in July from that in June yet remained well above production in July 2005, according to data compiled by the U.S. Geological Survey. Production in July 2005 was reduced by a workers strike at ASARCO Incorporated that began on July 2. Despite the strike in 2005, U.S. production for the first 7 months of 2006 was up only minimally from that during the first 7 months of 2005.

Production in the first 7 months of 2006 fell short of expectations at several new mines. Constellation Copper Corp. (Denver, CO) reported that production for June and July at their Lisbon Valley Mine in Utah was less than their earlier projections owing to the compounding effects of lower than expected ore throughput, lower than anticipated ore grades, and below-budget additions of acid and water to the leach pads. Electrowon production for June and July was 442 metric tons (t) and 289 t, respectively. In response to the poor performance, several operational changes, including tighter ore control to reduce the inclusion of acid-consuming waste rock, were implemented. Ramp-up to full capacity of about 2,000 metric tons per month (t/mo) of electrowon copper was expected by yearend (Constellation Copper Corp., 2006).

At Revett Minerals Inc.'s (Spokane Valley, WA) Troy Mine in Montana, production for the second quarter totaled only about 926 t of copper in concentrate. Production during the second quarter had been expected to reach capacity of about 1,000 t/mo of copper, but mill throughput was less than expected owing to water inflow occasioned by rapid snow melt and unusually heavy spring rains that limited access to the lower portion of the mine (Revett Minerals Inc., 2006).

Though expected to increase during the second half of the year, production at Phelps Dodge Corp.'s domestic mines in the first half of 2006 was about 10,000 t lower than that in the first 6 months of 2005, principally owing to lower production at its Bagdad Mine in Arizona. On July 10, Phelps Dodge received the final requisite permit, an air quality permit from the Arizona

Department of Environmental Quality, for its Safford, AZ, project. Construction of facilities was slated to begin in August (Phelps Dodge Corp., 2006, p. 5, 11).

Though consumption of refined copper for the first 7 months of 2006 was up by more than 1% from that of the first 7 months of 2005, consumption in July fell by almost 7% from that in June and was down by about 6% from that in July 2005. According to the American Bureau of Metal Statistics, Inc., the apparent consumption of wire rod in July fell by almost 18% from that in June owing to seasonal weakness, and shipments by U.S. brass mills fell by 20% in July from June's level to the lowest level since 2001. Particularly hard hit was the copper tube market, where high copper prices and a weaker housing market resulted in a 27% drop in shipments from those in June. The copper tube market is viewed as the copper market segment most vulnerable to substitution by other materials owing to high copper prices (American Bureau of Metal Statistics, Inc., 2006a, b).

## **References Cited**

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American Bureau of Metal Statistics, Inc., 2006b, US copper wirerod market— July 2006: Chatham, NJ, American Bureau of Metal Statistics, Inc., September 29, 5 p.

Constellation Copper Corp., 2006, Update on ramp-up production schedule for Lisbon Valley Copper Mine: Denver, CO, Constellation Copper Corp. press release, August 2, 2 p.

Phelps Dodge Corp., 2006, Phelps Dodge reports second quarter net income of \$471.7 million, or \$2.32 per share, (includes mark-to-market charges of \$514.6 million, or \$2.53 per share, from copper price protection programs and net special charges of \$9.8 million, or 5 cents per share); cash from operating activities of \$1,111.8 million: Phoenix, AZ, Phelps Dodge Corp. news release, July 26, 17 p.

Revett Minerals Inc., 2006, Revett Minerals reports improving levels of quarterly profits: Spokane Valley, WA, Revett Minerals Inc. news release, August 10, 8 p.

 $\label{table 1} \textbf{TABLE 1}$  SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES  $^1$ 

(Metric tons, unless otherwise specified)

-				2006	
	Source				January -
	table <sup>2</sup>	2005 <sup>p</sup>	June	July	July
Production:					
Primary:	_				
Mine, recoverable	(2)	1,140,000	101,000 <sup>r</sup>	103,000	693,000
Refinery:	_				
Electrolytic:	-				
Domestic and foreign	(4)	654,000	65,100	58,200	424,000
Electrowon	(4)	554,000	45,700	45,200	311,000
Total	(4)	1,210,000	111,000 <sup>r</sup>	103,000	735,000
Secondary recoverable copper:	_				
Refineries	(5)	47,200	3,700	3,700	26,100
Ingot makers <sup>3</sup>	(5)	89,500	7,460	7,460	52,200
Brass and wire-rod mills	(5)	697,000	64,400 <sup>r</sup>	60,100	439,000
Foundries, etc. <sup>3</sup>	(5)	58,400	4,870	4,870	34,100
Smelter, total	(3)	523,000	43,300	42,500	356,000
Consumption:					
Apparent	(8)	2,390,000	215,000	NA	NA
Refined (reported)	(7)	2,270,000	195,000 <sup>r</sup>	182,000	1,330,000
Purchased copper-base scrap	(9)	1,130,000	102,000 <sup>r</sup>	95,400	698,000
Stocks at end of period:	-				
Total refined	(11)	65,900	76,600	86,400	XX
Blister, etc.	(11)	44,300	13,500	18,500	XX
Prices:	=				
U.S. producer cathode (cents per pound) <sup>4</sup>	(12)	173.493	345.474	368.147	298.732
Imports: <sup>5</sup>	=				
Ores and concentrates <sup>6</sup>	(14)	223		NA	NA
Refined	(14)	1,000,000	94,100	NA	NA
Exports: <sup>5</sup>	_				
Ores and concentrates <sup>6</sup>	(15)	137,000	53,300	NA	NA
Refined	(15)	39,500	13,100	NA	NA

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised. NA Not available. XX Not applicable. -- Zero.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

 $<sup>^2\</sup>mbox{Numbers}$  in parentheses refer to the significant tables where these data are located.

 $<sup>^3\</sup>mbox{Monthly}$  data and 2005 cumulative data estimated based on 2004 monthly average.

<sup>&</sup>lt;sup>4</sup>Source: Platts Metals Week.

<sup>&</sup>lt;sup>5</sup>Source: U.S. Census Bureau.

 $<sup>^6</sup>$ Copper content.

TABLE 2  $\label{eq:mine_production} \mbox{MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES}^1$ 

### (Metric tons)

	Re	coverable coppe	r		Contained copper	
Period	Arizona	Others <sup>2</sup>	Total	Electrowon	Concentrates <sup>3</sup>	Total
2005: <sup>p</sup>						
January - July	418,000	269,000 r	687,000 <sup>r</sup>	321,000 <sup>r</sup>	377,000	698,000 <sup>r</sup>
July	54,400	35,700	90,100	46,600	44,700	91,300
August	55,200	33,800	89,000	47,300	42,800	90,100
September	53,500	39,200	92,700	46,300	47,700	93,900
October	53,300	35,200	88,500	45,200	44,500	89,700
November	52,800	34,100	86,900	45,800	42,300	88,100
December	57,500	38,300	95,800	48,000	49,200	97,200
Year	690,000	450,000	1,140,000	554,000	603,000	1,160,000
2006:						
January	55,900	36,600	92,600	43,000	51,300	94,300
February	52,700	34,400	87,100	39,600	49,200	88,800
March	60,800	44,400	105,000	45,300	62,000	107,000
April	58,900	39,000	97,900	44,400	55,400	99,900
May	61,900	44,000 <sup>r</sup>	106,000 <sup>r</sup>	47,700 <sup>r</sup>	60,700 <sup>r</sup>	108,000 <sup>r</sup>
June	60,300	41,100 <sup>r</sup>	101,000 <sup>r</sup>	45,700 <sup>r</sup>	57,600 <sup>r</sup>	103,000 °
July	60,300	42,500	103,000	45,200	59,600	105,000
January - July	411,000	282,000	693,000	311,000	396,000	707,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

 $\label{eq:table 3} \textbf{COPPER PRODUCED AT SMELTERS IN}$  THE UNITED STATES, BY SOURCE  $^{1,\,2}$ 

# (Metric tons, copper content)

	Anode
Period	production
2005: <sup>p</sup>	
January - July	284,000 r
July	36,500
August	49,300
September	48,500
October	51,800
November	47,500
December	42,200
January - December	523,000
2006:	
January	54,100
February	54,600
March	53,000
April	49,200
May	59,300
June	43,300
July	42,500
January - July	356,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes production from Alaska, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

<sup>&</sup>lt;sup>3</sup>Includes copper content of precipitates and other metal concentrates.

<sup>&</sup>lt;sup>1</sup>Includes blister, anode and copper from primary or secondary sources.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to total shown.

 $\label{eq:table 4} \textbf{TABLE 4}$  PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY  $^1$ 

### (Metric tons)

	Prii	nary materials			
	Electrolytically				Total
Period	refined <sup>2</sup>	Electrowon	Total	Scrap	refined
2005: <sup>p</sup>					
January - July	373,000 <sup>r</sup>	321,000 r	694,000 <sup>r</sup>	28,400	722,000
July	49,500	46,600	96,100	3,940	100,000
August	51,200	47,300	98,500	3,590	102,000
September	52,900	46,300	99,100	3,860	103,000
October	55,600	45,200	101,000	3,700	104,000
November	58,700	45,800	105,000	3,760	108,000
December	63,100	48,000	111,000	3,880	115,000
Year	654,000	554,000	1,210,000	47,200	1,260,000
2006:	_				
January	53,000	43,000	96,000	3,820	99,900
February	57,300	39,600	96,900	3,720	101,000
March	68,400	45,300	114,000	3,770	117,000
April	60,800	44,400	105,000	3,700	109,000
May	61,500	47,700 <sup>r</sup>	109,000 <sup>r</sup>	3,730	113,000
June	65,100	45,700 <sup>r</sup>	111,000 <sup>r</sup>	3,700	115,000
July	58,200	45,200	103,000	3,700	107,000
January - July	424,000	311,000	735,000	26,100	761,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

 ${\it TABLE~5}$  COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP  $^1$ 

# (Metric tons, copper content)

	Refin	eries <sup>2</sup>	Ingot m	akers <sup>3</sup>	Brass and wi	re-rod mills	Foundrie	es, etc. <sup>3</sup>	
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	Total <sup>4</sup>
2005: <sup>p</sup>									
January - July	9,350	19,100	15,000 <sup>r</sup>	37,200 <sup>r</sup>	383,000 <sup>r</sup>	19,900	14,300 <sup>r</sup>	19,800 <sup>r</sup>	517,000 <sup>r</sup>
July	1,340	2,610	2,140	5,320	51,000	2,840	2,040	2,830	70,100
August	1,340	2,260	2,140	5,320	56,400	2,840	2,040	2,830	75,200
September	1,340	2,520	2,140	5,320	56,800	2,810	2,040	2,830	75,800
October	1,340	2,360	2,140	5,320	59,000	1,410	2,040	2,830	76,400
November	1,340	2,420	2,140	5,320	57,300	1,410	2,040	2,830	74,800
December	1,340	2,550	2,140	5,320	54,500	1,490	2,040	2,830	72,200
Year	16,000	31,200	25,700	63,800	667,000	29,800	24,500	33,900	892,000
2006:									
January	1,340	2,480	2,140	5,320	63,500	1,460	2,040	2,830	81,100
February	1,340	2,390	2,140	5,320	58,300	496	2,040	2,830	74,900
March	1,340	2,430	2,140	5,320	62,700	1,560	2,040	2,830	80,400
April	1,340	2,370	2,140	5,320	60,700	1,060	2,040	2,830	77,800
May	1,340	2,400	2,140	5,320	62,900	1,840	2,040	2,830	80,800
June	1,340	2,370	2,140	5,320	63,000 <sup>r</sup>	1,400 r	2,040	2,830	80,400
July	1,340	2,370	2,140	5,320	59,400	697	2,040	2,830	76,100
January - July	9,350	16,800	15,000	37,200	430,000	8,500	14,300	19,800	551,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>From domestic and foreign source materials.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Electrolytically refined and fire-refined scrap based on source of material at smelter level.

<sup>&</sup>lt;sup>3</sup>Monthly data and 2005 cumulative data estimated based on 2004 annual data.

<sup>&</sup>lt;sup>4</sup>Does not include an estimate, based on reported 2004 data of 3,096 tons per month from new scrap and 2,016 tons per month of copper recovered from scrap other than copper-base.

 ${\bf TABLE~6}$  PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES  $^1$ 

(Metric tons, gross weight)

	Pro	duction	Shi	pments	Stocks, e	nd of period
Period	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2005: <sup>p</sup>						
January - July	783,000	991,000	792,000	991,000	XX	XX
July	109,000	148,000	113,000	140,000	46,100	31,000
August	123,000	147,000	123,000	152,000	46,200	25,600
September	122,000	155,000	122,000	155,000	45,300	24,800
October	125,000	143,000	124,000	140,000	45,900	26,700
November	118,000	134,000	119,000	136,000	44,900	25,400
December	104,000	131,000	101,000	128,000	47,900	25,100
Year	1,370,000	1,700,000	1,380,000	1,700,000	XX	XX
2006:	<u> </u>					
January	112,000	155,000	111,000	148,000	48,800	32,100
February	114,000	125,000	114,000	133,000	48,500	22,000
March	117,000	143,000	118,000	144,000	49,900	21,100
April	115,000	137,000	115,000	139,000	49,100	21,300
May	120,000	145,000	122,000	149,000 <sup>r</sup>	47,300	20,700
June	118,000	144,000	117,000	144,000	48,500 <sup>r</sup>	20,200
July	101,000	138,000	104,000	135,000	45,700	23,400
January - July	797,000	986,000	801,000	992,000	XX	XX

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised. XX Not applicable.

TABLE 7 CONSUMPTION OF REFINED COPPER<sup>1</sup>

#### (Metric tons)

	Brass	Wire-rod	Other	
Period and item	mills	mills	plants <sup>2</sup>	Total
2005: <sup>p</sup>			•	
January - July	306,000 r	970,000	36,100	1,310,000
July	42,100	146,000	5,160	193,000
August	45,900	151,000	5,160	202,000
September	45,300	154,000	5,160	204,000
October	46,200	144,000	5,160	195,000
November	42,900	135,000	5,160	183,000
December	41,200	126,000	5,160	173,000
Year	528,000	1,680,000	61,900	2,270,000
2006:				
January	44,300	159,000	5,160	209,000
February	42,600	125,000	5,160	172,000
March	45,000	135,000	5,160	185,000
April	42,800	141,000	5,160	189,000
May	47,200	147,000 <sup>r</sup>	5,160	199,000
June	41,500 <sup>r</sup>	148,000	5,160	195,000
July:				-
Cathodes	25,300	140,000	954	166,000
Wire bars			(3)	(3)
Ingots and ingot bars	2,060		2,130	4,180
Cakes and slabs	(3)		(3)	(3)
Billets and other	9,810		2,080	11,900
Total	37,200	140,000	5,160	182,000
January - July	301,000	994,000	36,100	1,330,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised. -- Zero.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2004 annual data.

<sup>&</sup>lt;sup>3</sup>Withheld to avoid disclosing company proprietary data; included with "Billets and other."

 $\label{eq:table 8} \textbf{U.S.} \ \textbf{APPARENT CONSUMPTION OF COPPER}^1$ 

### (Metric tons)

	Refined copper	Copper in	Refined general	Refined	Stock change	Apparent
Period	production	old scrap <sup>2</sup>	imports <sup>3</sup>	exports <sup>3</sup>	during period	consumption
2005: <sup>p</sup>						
January - July	694,000	105,000	520,000	26,900	(44,700)	1,340,000
July	96,100	14,700	75,500	3,010	(9,110)	192,000
August	98,500	14,400	76,900	2,650	(11,000)	198,000
September	99,100	14,700	79,400	1,800	(10,700)	202,000
October	101,000	13,200	99,100	3,350	(4,470)	214,000
November	105,000 <sup>r</sup>	13,100	99,700	1,760	(4,780)	220,000
December	111,000	13,200	102,000	3,020	4,960	218,000
Year	1,210,000 <sup>r</sup>	173,000	977,000	39,500	(70,700)	2,390,000
2006:						
January	96,000	13,200 <sup>r</sup>	111,000	5,600	16,200	199,000
February	96,900	12,000 <sup>r</sup>	108,000	7,320	22,900	187,000
March	114,000	13,300	80,100	6,780	4,100	196,000
April	105,000	12,600	69,100	9,600	(18,500)	196,000
May	109,000 <sup>r</sup>	13,400	100,000	6,270	(2,890)	219,000
June	111,000 <sup>r</sup>	12,900 <sup>r</sup>	94,100	13,100	(10,700)	215,000
July	103,000	12,200	NA	NA	9,840	NA
January - July	735,000	89,600	NA	NA	20,800	NA

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised. NA Not available.

 ${\bf TABLE~9} \\ {\bf CONSUMPTION~OF~PURCHASED~COPPER-BASE~SCRAP}^1 \\$ 

# (Metric tons, gross weight)

	Smelt	ters			Brass	and			
	and refi	neries	Ingot m	akers <sup>2</sup>	wire-roo	d mills <sup>3</sup>	Foundrie	es, etc. <sup>2</sup>	Total scrap
Period	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	used
2005: <sup>p</sup>									
January - July	9,460 <sup>r</sup>	19,300	23,400 <sup>r</sup>	53,500 <sup>r</sup>	486,000	21,000	24,800 r	22,300 r	659,000 <sup>r</sup>
July	1,350	2,640	3,350	7,640	64,300	2,980	3,550	3,180	89,000
August	1,350	2,280	3,350	7,640	71,400	2,980	3,550	3,180	95,700
September	1,350	2,550	3,350	7,640	71,700	2,990	3,550	3,180	96,400
October	1,350	2,380	3,350	7,640	74,100	1,550	3,550	3,180	97,000
November	1,350	2,580	3,350	7,640	71,600	1,530	3,550	3,180	94,700
December	1,350	2,570	3,350	7,640	68,000	1,640	3,550	3,180	91,300
Year	16,200	31,700	40,200	91,700	842,000	31,600	42,600	38,200	1,130,000
2006:									
January	1,350	2,790	3,350	7,640	79,400	1,590	3,550	3,180	103,000
February	1,350	2,670	3,350	7,640	72,900	659	3,550	3,180	95,300
March	1,350	2,670	3,350	7,640	78,500	1,730	3,550	3,180	102,000
April	1,350	2,670	3,350	7,640	75,500	1,070	3,550	3,180	98,300
May	1,350	2,670	3,350	7,640	78,300	1,850	3,550	3,180	102,000
June	1,350	2,670	3,350	7,640	78,900 <sup>r</sup>	1,410 <sup>r</sup>	3,550	3,180	102,000 <sup>r</sup>
July	1,350	2,670	3,350	7,640	73,000	704	3,550	3,180	95,400
January - July	9,460	18,800	23,400	53,500	537,000	9,020	24,800	22,300	698,000

Preliminary. Revised.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2004 data.

<sup>&</sup>lt;sup>3</sup>Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Monthly data and 2005 cumulative data estimated from 2004 annual data.

<sup>&</sup>lt;sup>3</sup>Consumption at brass and wire-rod mills assumed equal to receipts.

 ${\bf TABLE~10}$  CONSUMPTION OF PURCHASED COPPER-BASE SCRAP  $^{1,\,2}$ 

(Metric tons, gross weight)

	2005 <sup>p</sup>			20	006	
Scrap type and processor	January - July	Year	May	June	July	January - July
No. 1 wire and heavy:						
Smelters and refiners	34,200 <sup>r</sup>	58,900	5,240	5,240	5,240	36,700
Brass and wire-rod mills	219,000	382,000	36,600	35,200 <sup>r</sup>	35,600	246,000
No. 2 mixed heavy and light:						
Smelters and refiners	15,700 <sup>r</sup>	25,200	1,550	1,520	1,520	10,900
Brass and wire-rod mills	3,230	5,260	1,420	1,400	1,180	7,970
Total unalloyed scrap:						
Smelters and refiners	49,900 <sup>r</sup>	84,100	6,790	6,760	6,760	47,600
Brass and wire-rod mills	222,000 <sup>r</sup>	387,000	38,000	36,600 <sup>r</sup>	36,800	254,000
Red brass: <sup>3</sup>						
All plants	22,700 <sup>r</sup>	40,700	3,220	3,310	2,970	23,200
Leaded yellow brass:						
All plants	111,000	191,000	15,500	17,300	14,200	113,000
Yellow and low brass:						
All plants	103,000	175,000	16,100	15,600	13,900	107,000
Cartridge cases and brass:						
All plants	55,500	94,500	8,420	7,860	6,840	55,500
Auto radiators:						
Smelters and refiners	14,600 <sup>r</sup>	25,000	2,080	2,080	2,080	14,600
Bronzes:						
Smelters and refiners	6,480 <sup>r</sup>	11,100	925	925	925	6,480
Brass mills	3,260	5,790	490	788	600	4,320
Nickel-copper alloys:						
All plants	11,300	18,200	1,720	1,940	1,540	11,700
Low grade and residues:						
Smelters and refiners	20,600 <sup>r</sup>	35,300	2,940	2,940	2,940	20,600
Other alloy scrap: <sup>4</sup>						
Smelters and refiners	658 <sup>r</sup>	1,130	94	94	94	658
Brass mills	3,500 <sup>r</sup>	6,000	500	500	500	3,500
Total alloyed scrap:						
Smelters and refiners	67,100 <sup>r</sup>	115,000	9,590	9,590	9,590	67,100
Brass mills	285,000 <sup>r</sup>	488,000	42,400	43,800	37,000	293,000
Total scrap:						
Smelters and refiners	117,000 <sup>r</sup>	199,000	16,400	16,300	16,300	115,000
Brass and wire-rod mills	507,000	876,000	80,400	80,500	73,800	547,000

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised.

<sup>&</sup>lt;sup>1</sup>Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 6,728 tons of scrap per month based on 2004 annual data; monthly data include estimates of about 10,984 tons of scrap per month consumed by ingot makers.

<sup>&</sup>lt;sup>2</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>3</sup>Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

<sup>&</sup>lt;sup>4</sup>Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

# $\label{eq:table 11} \text{COPPER STOCKS AT END OF PERIOD}^1$

### (Metric tons)

-		Refined copper						
	Crude		Wire-rod					Total
Period	copper <sup>2</sup>	Refineries <sup>3</sup>	$mills^3$	Brass mills <sup>3</sup>	Other <sup>4</sup>	Comex <sup>5</sup>	$LME^6$	refined
2005: <sup>p</sup>								
July	33,300	8,330	29,800	19,900	5,750	9,970	18,200	91,900
August	43,800	5,540	28,600	20,700	5,750	8,420	11,900	80,900
September	54,800	5,950	20,700	20,800	5,750	6,910	10,000	70,200
October	50,900	6,640	17,200	21,900	5,750	3,350	10,800	65,700
November	42,900	6,210	18,400	23,400	5,750	3,340	3,830	60,900
December	44,300	8,190	20,400	24,500	5,750	6,180	800	65,900
2006:								
January	17,300	11,200	26,800	27,800	5,750	10,600	25	82,100
February	21,700	14,500	28,600	29,900	5,750	27,600		106,000
March	15,200	13,300	27,700	28,100	5,750	32,000	1,880	109,000
April	18,800	7,690	28,400	31,700	5,750	15,500	1,080	90,200
May	40,600	9,960	30,300	31,400	5,750	9,540	350	87,300
June	13,500	6,210	24,400	32,700 <sup>r</sup>	5,750	7,900	225	77,200
July	18,500	7,950	31,600	34,300	5,750	6,760		86,400

<sup>&</sup>lt;sup>p</sup>Preliminary. <sup>r</sup>Revised. -- Zero

TABLE 12
AVERAGE PRICE OF COPPER IN THE UNITED STATES
AND ON THE LONDON METAL EXCHANGE

# (Cents per pound)

	U.S. producers	Comex	LME
	delivered price	first	cash price
Period	cathode1	position <sup>2</sup>	Grade A
2005:			
July	168.484	163.218	163.909
August	176.905	171.639	172.230
September	180.623	175.350	174.959
October	195.568	190.302	184.119
November	206.396	201.130	193.622
December	222.511	217.245	207.569
Year	173.493	168.227	166.837
2006:			
January	224.000	218.258	214.716
February	230.905	225.079	225.965
March	238.235	232.409	231.438
April	302.679	296.853	289.673
May	381.687	375.861	364.874
June	345.474	339.648	326.400
July	368.147	362.321	349.740
January - July	298.732	292.918	286.115

<sup>&</sup>lt;sup>1</sup>Listed as "U.S. producer cathode."

Sources: Platts Metals Week and American Metal Market.

 $<sup>^{1}\</sup>mbox{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Copper content of blister and other materials in transit and in process of refining.

<sup>&</sup>lt;sup>3</sup>Stocks of refined copper as reported; no estimates are made for nonrespondents.

<sup>&</sup>lt;sup>4</sup>Monthly estimates based on reported and 2004 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

<sup>&</sup>lt;sup>5</sup>Commodity Exchange Inc., New York.

<sup>&</sup>lt;sup>6</sup>London Metal Exchange Ltd., U.S. warehouses.

<sup>&</sup>lt;sup>2</sup>Listed as "Comex high grade first position."

 ${\it TABLE~13}$  NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

			Dealers	(New York)
				Red brass
	Brass mills	Refiners	No. 2	turnings and
Month	No. 1 scrap	No. 2 scrap	Scrap	borings
2005:				
July	153.40	141.60	99.00	65.00
August	142.26	126.52	99.00	65.00
September	142.86	128.38	99.00	65.00
October	176.90	162.95	99.00	65.00
November	183.70	168.10	99.00	65.00
December	201.59	179.59	117.91	74.07
Year	153.46	137.28	95.92	61.10
2006:				
January	208.32	188.91	125.00	82.50
February	221.85	206.90	125.00	82.50
March	229.26	225.24	170.00	77.50
April	283.85	257.95	170.00	77.50
May	355.17	322.74	170.00	77.50
June	310.98	279.19	192.62	121.10
July	333.43	273.15	197.35	118.20
January - July	277.55	250.58	164.28	90.97

Source: American Metal Market.

 ${\it TABLE~14} \\ {\it U.S.~IMPORTS~FOR~CONSUMPTION~OF~COPPER~(UNMANUFACTURED),~BY~CLASS}^1$ 

(Metric tons, copper content)

	Ore	and concer	ntrate	Matte, ash and precipitates			Blis	ster and anod	les	Refined			
		20	006		2006			20	06		2006		
Country or	Country or Januar		January -		January -		•	January -		•		January -	
territory	2005	June	June	2005	June	June	2005	June	June	2005	June	June	
Austria										3,360		1,510	
Brazil							10			30,500	2,510	14,100	
Canada	2		191	138	35	199	86,500	7,020	40,800	296,000	18,600	126,000	
Chile							41,700	7,150	31,200	429,000	50,400	269,000	
Finland							65	(2)	527	2,910			
Germany							12			24,900	2,420	16,500	
Japan							(2)	(2)	(2)	5,340	542	3,320	
Kazakhstan										6,300	6,600	28,800	
Mexico	221			37		17	3,870	333	1,340	28,900	929	11,900	
Peru										154,000	12,000	84,100	
Taiwan				1,180	84	550							
Other			1	287		77	16		1	23,200	161	7,310	
Total	223		192	1,640	119	843	132,000	14,500	73,800	1,000,000	94,100	563,000	

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

 $\label{eq:table 15} \text{U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS}^1$ 

(Metric tons, copper content)

	Ore and concentrate			Matte, ash	Matte, ash and precipitates			er and ano	des	Refined		
		2006 January -			20	06		2006			2006	
Country or	•				January -			January -		•		January -
territory	2005	June	June	2005	June	June	2005	June	June	2005	June	June
Australia				11		1,840	43		27	67		64
Belgium	41			37		74	724		359	49		
Canada	18,300	12,700	24,100	30,900	6,040	39,300	20,500	92	2,900	2,070	11,200	36,500
China	75,700		58,200	9,650	366	3,880	343	60	181	19,000	877	5,580
Costa Rica	3			(2)		7	1			2		(2)
Germany				93			779	35	392	182	2	11
Hong Kong	2			1		2	3,190	237	2,160	7		22
India	149		2	1		3	58	15	88	6,650	367	2,280
Japan	28,700	15,200	37,300	70	2	2	2,230		434	5		(2)
Korea, Republic of	1	10,500	10,500	32		11	464	35	520	132	1	42
Mexico	6,380	14,800	21,700	682	83	140	2,660	5	246	9,860	604	3,220
Saudi Arabia							11			11		93
Singapore	19			20	(2)	26	491	20	279	13		
Spain	1,730	84	212				203		100		26	43
Sweden							3,190	482	1,820			2
Taiwan	15			14		3	1,680	180	906	180		188
Other	5,600	24	156	338	158	705	4,950	145	1,330	1,300	57	645
Total	137,000	53,300	152,000	41,800	6,650	46,000	41,600	1,310	11,700	39,500	13,100	48,700

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 $\label{eq:table 16} \text{U.S. COPPER SCRAP IMPORTS}^1$ 

(Metric tons, gross weight)

		Unalloyed		Alloyed				
		200	06		2006			
Country or	-		January -			January -		
territory	2005	June	June	2005	June	June		
Brazil				276	21	119		
Canada	9,080	965	3,620	47,700	4,670	25,000		
China		1	1	120	27	283		
Costa Rica	2,020	138	822	495	134	545		
Germany	85		25	76		1		
Guatemala	79	5	69	1,500	267	1,100		
Honduras	1,910	136	1,110	651	104	434		
Jamaica	269	22	175	125	19	54		
Japan	70	15	72	135	2	29		
Mexico	13,300	589	3,650	24,800	3,500	14,800		
Nicaragua	831	79	429	573	62	254		
Russia						101		
Singapore				102		100		
Taiwan	2			348	1	144		
United Kingdom	258	20	97	925	93	318		
Other	2,150	128	1,480	5,850	631	2,300		
Total	30,100	2,100	11,500	83,700	9,530	45,500		

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

 $<sup>^{1}\</sup>mathrm{Data}$  are rounded to no more than three significant digits; may not add to totals shown.

<sup>&</sup>lt;sup>2</sup>Less than ½ unit.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

 $\label{eq:table 17} \text{U.S. COPPER SCRAP EXPORTS}^1$ 

(Metric tons, gross weight)

				Unalloyed		Alloyed						
				20	006	,	2006					
		No	o. 1	No	No. 2		Other		Segregated		Unsegregated	
Country or			January -		January -		January -			January-		January-
territory	2005	June	June	June	June	June	June	2005	June	June	June	June
Belgium	644		156		18	117	740	6,890	117	690	1,140	5,530
Canada	27,900					7,060	29,700	13,900	1,450	7,430	2,730	11,900
China	265,000	3,410	16,900	10,600	61,300	5,690	29,600	182,000	11,000	59,600	8,230	49,200
Germany	10,600	98	1,230	75	347	759	3,180	9,990	337	2,010	1,320	5,760
Hong Kong	9,200	22	99	260	1,130	58	333	12,800	68	547	977	5,280
India	4,460	19	220			80	707	15,800	471	6,100	119	363
Japan	6,710		334	58	97	384	2,160	7,950	601	3,150	78	525
Korea, Republic of	27,200	970	5,260	275	2,270	712	4,170	10,200	1,280	5,930	20	48
Mexico	1,010	10	106				21	1,570	220	551	867	3,640
Spain	145	2	7				2	5,580	9	31	1,660	5,340
Taiwan	11,600	265	905	683	2,010	110	1,230	10,600	316	3,880		42
Thailand	874						98	475	20	225		
United Kingdom	276		1				80	3,440	55	149		
Other	1,120	135	483	19	57	57	1,040	10,200	121	1,300	479	4,160
Total	366,000	4,930	25,700	11,900	67,300	15,000	73,100	291,000	16,100	91,600	17,600	91,700

<sup>--</sup> Zero.

Source: U.S. Census Bureau.

<sup>&</sup>lt;sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.